

DIS - Wheeler Site – Frequently Asked Traffic Impact Analysis Questions

Who decided what will be analyzed in order to determine potential impacts related to this project?

The scope of the traffic analysis was developed through collaboration between the Washington State Department of Transportation (WSDOT) and the City of Olympia, and was determined to meet City standards for analysis required in connection with new development.

The traffic study area identified for the DIS – Wheeler Site project is generally bounded by Capitol Way to the west, Jefferson Street SE and Henderson Boulevard to the east, 5th Avenue to the north and 21st Avenue to the south.

What project-related factors are analyzed in a Traffic Impact Analysis (TIA)?

Development proposals that are subject to SEPA require a Traffic Impact Analysis to determine transportation concurrency and to estimate traffic impacts and mitigation. A brief description of the information found in a TIA includes:

Existing Conditions – This is a look at the project vicinity as it now exists, including current land use, an inventory of existing transportation facilities, and actual traffic conditions, such as when peak travel times occur and how many vehicles are present during those hours. Existing conditions information provides a framework from which to project and analyze future conditions.

Project Traffic Characteristics – This section of the study determines estimated project-related traffic volumes and behavior. ***Trip generation*** – number of new project-related trips to the surrounding network of roadways – is estimated based on proposed land uses. ***Trip distribution*** – where the vehicles are going – and ***trip assignment*** – which routes they will take to get there – are estimated as percentages, using the accepted local or regional traffic model.

What is “SEPA”?

SEPA stands for State Environmental Policy Act, a Washington state law that requires analysis to determine potential impacts to the environment that could occur as a result of a proposed development project.

Concurrency and Transportation

State law requires that before a new development is permitted, the project must pass a test of concurrency, ensuring one of the following to be true:

- 1) Adequate infrastructure to accommodate transportation impacts is already in place
 - 2) Infrastructure improvements to support transportation impacts will be constructed with the project
 - 3) Financial commitments are in place to build the needed improvements within a six-year timeframe
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Level of Service (LOS) Defined

LOS ratings indicate how efficiently a particular roadway segment or intersection handles traffic conditions during peak travel times. As traffic volumes approach designed capacity, congestion increases, resulting in declining LOS. Olympia rates LOS of transportation facilities using the letters “A” through “F”; a rating of LOS A denotes efficient operations while a rating of LOS F indicates failure to accommodate current or expected traffic volumes.

The City of Olympia has specified LOS E as the acceptable standard for most intersections within the DIS – Wheeler Site project study area.

Horizon Year Baseline Conditions – The term “horizon year” refers to the expected completion date of the proposed project. This section of the TIA considers baseline conditions that could be expected to occur if the project were not constructed, in order to provide a comparison for use in identifying project-related impacts. Factors in the future baseline conditions include annual growth rates and those transportation improvements identified in local or regional long-range planning documents.

The final step of the analysis adds the estimated project traffic characteristics to the horizon year baseline conditions to project how the network will operate once the development is in place. The results of this analysis determine any improvements that might be necessary in order for the network to function at acceptable levels with the addition of project-related traffic.

Why is this analysis needed? Aren't future DIS-Wheeler employees already working on the Capitol Campus?

While the majority of employees that are expected to occupy buildings at the DIS – Wheeler Site do currently work on and around the Capitol Campus, existing buildings that these workers will vacate may be occupied by new users or replaced by new buildings in the future. Therefore, the TIA must look at the existing employment sites as potential traffic generators during the process of analyzing impacts that may result from the new development on the DIS – Wheeler Site.

What assumptions and methods were used to estimate the potential traffic impacts related to this project?

For purposes of the DIS – Wheeler Site development, traffic count data was obtained from the City of Olympia and from Trafficount, a local firm specializing in the collection of traffic data. All counts were conducted during State Legislative session in order to capture heaviest volumes.

The City of Olympia's TIA guidelines include trip generation rates based on land use. These rates are established using

Horizon Year & Expected Growth

Because the DIS – Wheeler Site is anticipated to be completed within two years, 2010 was used as the horizon year for this TIA. To determine expected 2010 traffic conditions, analysts estimate “background growth” by applying an incremental growth rate. The background growth rate used for analyzing future conditions in the vicinity of the proposed DIS – Wheeler Site was 2% annually, provided by the City of Olympia.

Regional Planning Model

Assumptions for future baseline traffic volumes and travel patterns were projected using the Thurston Regional Planning Council's (TRPC) transportation model, developed through cooperative efforts between TRPC and local jurisdictions within the region.

This model is the result of a process that considers existing and future planned land uses within a defined area, and through use of an industry-recognized software program, Emme2, produces estimated percentages of trip distribution and assignment. For the DIS – Wheeler Site project, those percentages were then applied to project trip generation estimates to calculate expected traffic patterns.

industry standards provided by the Institute of Transportation Engineers (ITE), and are adjusted by the City based on local experience.

What is the relation between number of employees, number of parking spaces and number of vehicle trips?

The DIS-Wheeler Site development is expected to support approximately 1,200 employees and provide 950 employee and visitor parking spaces. A primary factor used to estimate parking demand included required participation in Commute Trip Reduction (CTR), a State mandated program intended to reduce the number of vehicles on the road during peak travel times through use of transit, carpools, van pools, and alternative travel modes. State agency employment practices that allow for flexible work schedules, which means that not all employees will be on-site at the same time and, by extension, arrival and departure of employees will be spread over several hours each day, was also a consideration in determining the planned parking capacity.

The number of vehicle trips that must be accommodated during peak commute hours can also be related to the factors described above. A comparison of ITE peak hour and daily trip rates indicates that 9 – 14% of daily project-related traffic typically would arrive and/or depart during peak periods. DIS – Wheeler Site project-related trips anticipated throughout an entire day total approximately 2,500. Projected peak hour traffic volumes related to the DIS – Wheeler Site fall into that range, with AM and PM peak-hour trips estimated to be 317 and 306, respectively.

To what level does the TIA address parking issues?

Although a TIA typically provides a description of the proposed site plan which could include discussion of planned parking facilities, analysis conducted during the TIA process does not address parking issues.

Peak Hours Defined

Peak hours are those times of day when the maximum amount of travel occurs. Generally, there is a morning peak hour (AM peak) and an afternoon peak hour (PM peak).

A TIA uses peak hour data to analyze current and future conditions in order to ensure that existing facilities or planned improvements will have sufficient capacity to accommodate the heaviest traffic volumes.

What are the locations of proposed access points?

Two proposed access points for the DIS – Wheeler Site to/from Jefferson Street SE include the north entrance, located approximately 200 feet south of 14th Avenue SE, which will provide full access for a surface parking lot of approximately 20 spaces. The south entrance, a limited access located approximately 100 feet north of Maple Park Avenue SE, will have full entrance access to the parking garage, and outbound movements limited to right-turn only, to discourage exiting vehicles from using adjacent residential neighborhood streets as a travel route.

Proposed access points to/from 14th Avenue SE include the existing right-in, right-out (RIRO) access point at the eastern property line, which will provide service and emergency vehicle access. A new access point between the intersection of 14th Avenue SE and Jefferson Street SE will provide RIRO access to the underground garage. However, if intersection improvements at Jefferson Street SE and 14th Avenue SE involve construction of a roundabout, right-in access would need to be regulated.

An additional, service-only access is planned to be located on 16th Avenue SE.

What measures will be taken to ensure that the DIS – Wheeler Site traffic does not increase traffic through our neighborhood?

The proposed access points detailed above were developed through consultation with the Washington State Department of Transportation (WSDOT) and City of Olympia staff, in an effort to promote traffic safety as well as to discourage drivers exiting the site from choosing neighborhood streets as a travel route.

To reflect the desire to be a good neighbor, the State has committed to a joint effort with the City of Olympia to review neighborhood traffic data collected by the City. The goal of this process is to identify potential traffic calming measures

Discouraging Cut-Through Traffic

In addition to safety, a major goal in design of the proposed access points on Jefferson Street SE was to discourage drivers from using neighborhood roadways as a cut-through route. Configuration of the south access point allows only right-turning movements for exiting vehicles, directing traffic away from the neighborhood streets. Only those vehicles parked in one of twenty surface parking spaces will be permitted to exit via the north access point.

that could reduce numbers of vehicles using neighborhood roadways as an arrival route.

What about non-motorized travel?

Attached to this document are exhibits that illustrate conceptual traffic mitigation options and the types of bike and pedestrian features that could be associated with each.

The following questions represent concerns that, while valid, are not addressed within the required scope of a Traffic Impact Analysis:

1) What about the cut-through traffic and speeding that already exist in our neighborhoods? Does this analysis address those issues?

Several neighbors have expressed concerns related to current driving behavior. A TIA does analyze existing conditions to provide a framework from which to project and analyze future conditions. The results of the analyses point to recommended measures to mitigate project-specific impacts. However, solutions to concerns regarding pre-project driver behavior would need to be taken up with the City in a separate process.

2) What measures will be taken to improve I-5 access to accommodate additional commuters associated with this project?

Access to and capacity of I-5 falls under the jurisdiction of WSDOT. WSDOT has not requested analysis specific to issues of I-5 access and capacity in connection with this project. Any modifications deemed necessary would have to be determined through WSDOT's long-range planning processes.

3) Will there be any post-project monitoring to determine whether or not the traffic projections were accurate, as well as the effectiveness of roadway and intersection improvements constructed as a part of this project?

Please see the answer to 4), below.

4) If improvements associated with the project prove to be inadequate to accommodate actual traffic volumes, what steps will the State be willing to take to resolve the resulting problems?

Post-project monitoring is not a typical step of the TIA/permitting process. The City's TIA guidelines were developed in accordance with industry standards and the state law concurrency requirements, and are intended to apply the best possible science in analyzing/projecting traffic impacts that might be anticipated to result from new development. These guidelines and standards intend that impacts will be identified prior to development in order that mitigating actions will be complete by the time the development is in place.

The State wishes to be a good neighbor. Should improvements associated with the DIS – Wheeler Site be proven inadequate, the State would cooperate with the City and residents in an effort to identify appropriate solutions.

5) Will the City commit to preserving the historic character of our neighborhood by preventing conversion of homes to office space and yards to parking lots?

While preservation of neighborhood character is a concern shared by many residents, conversion of homes and yards to uses other than residential is a City zoning/permitting/enforcement issue and is therefore not addressed in the TIA/SEPA process connected to this project.

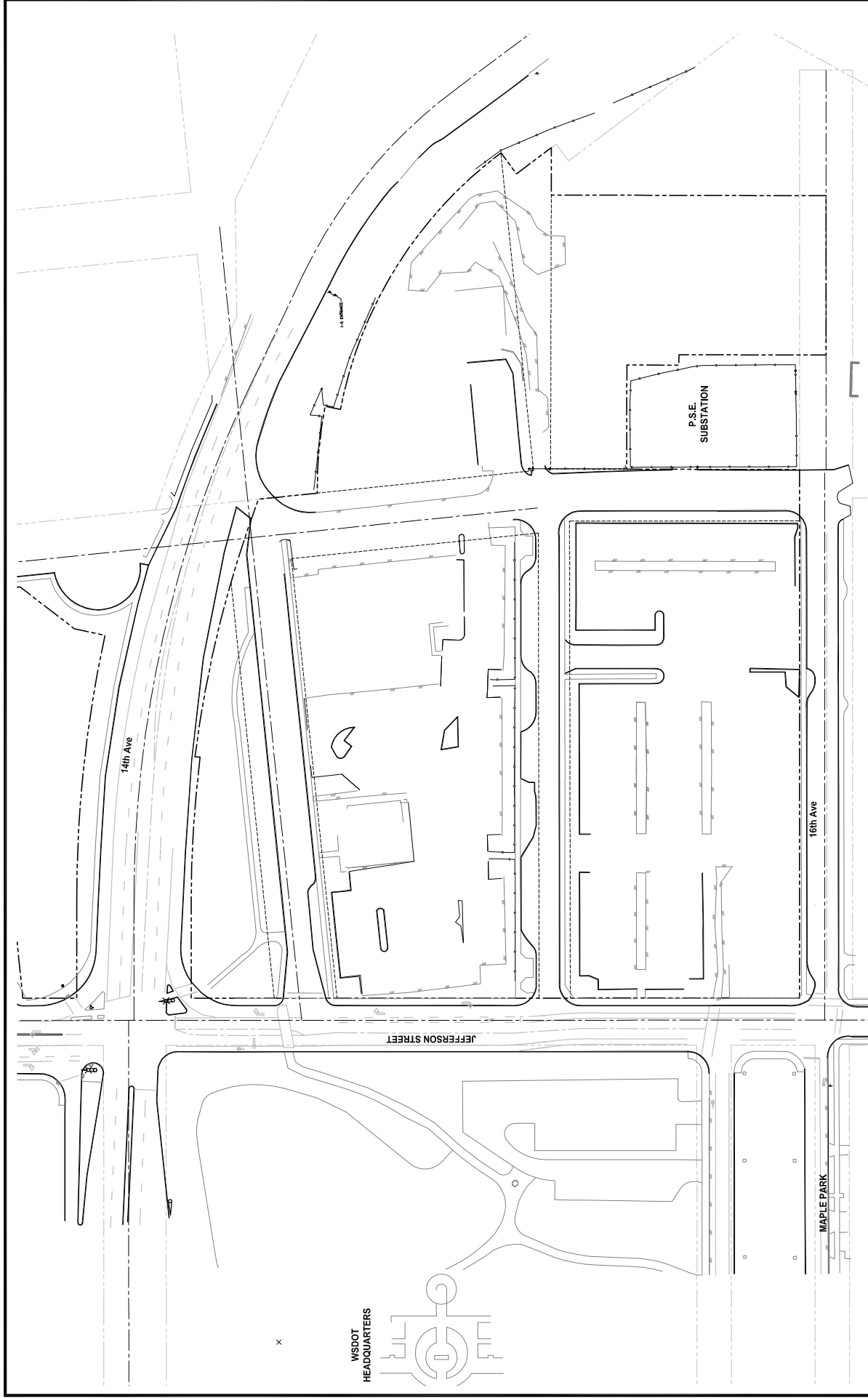


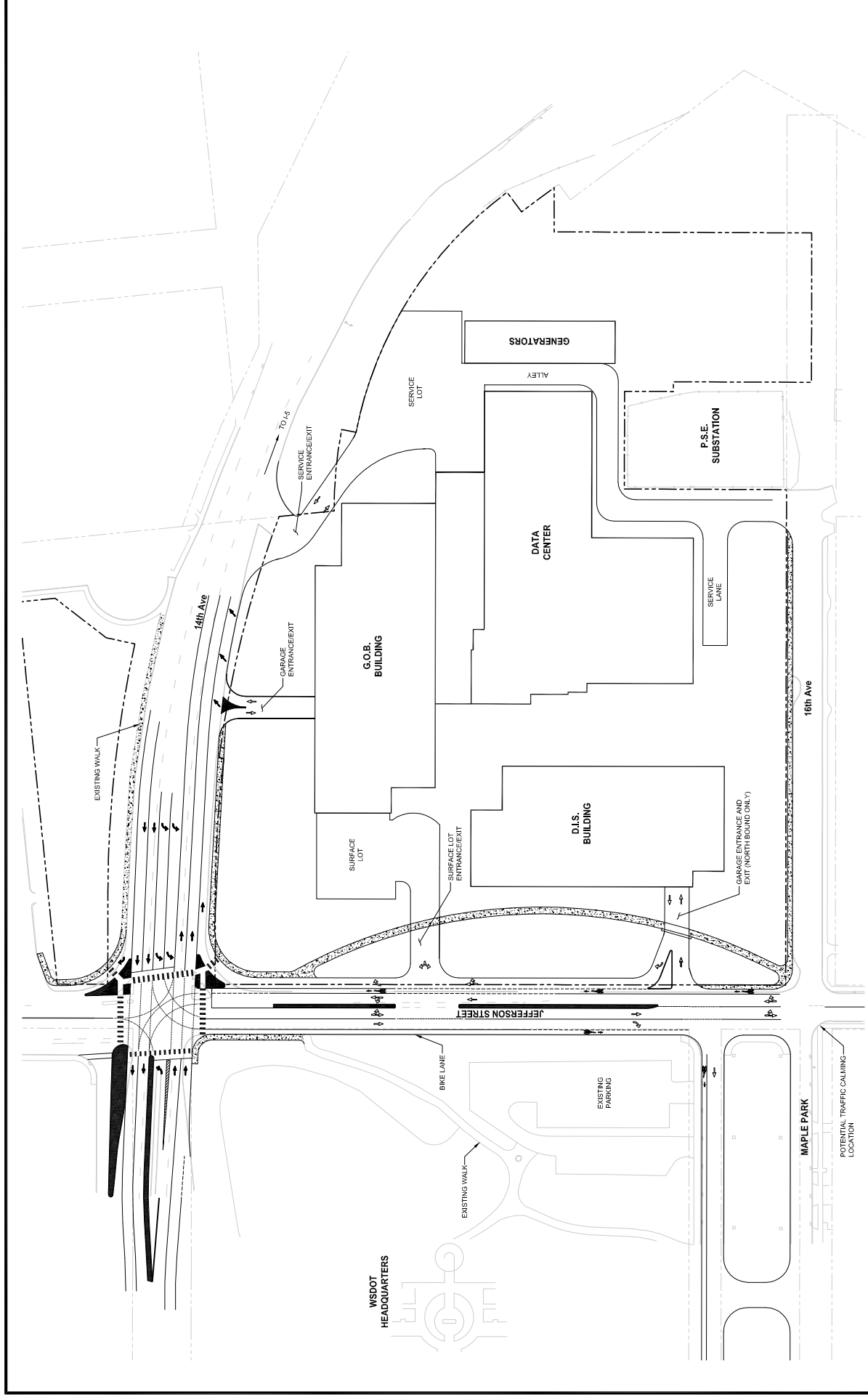
Figure 1
Existing Conditions
WSDIS - Wheeler Site

DATE: Mar 18, 2008 FILE: 2008_03-11_4575-003_FAQ_existing conditions

Parametrix



NO SCALE

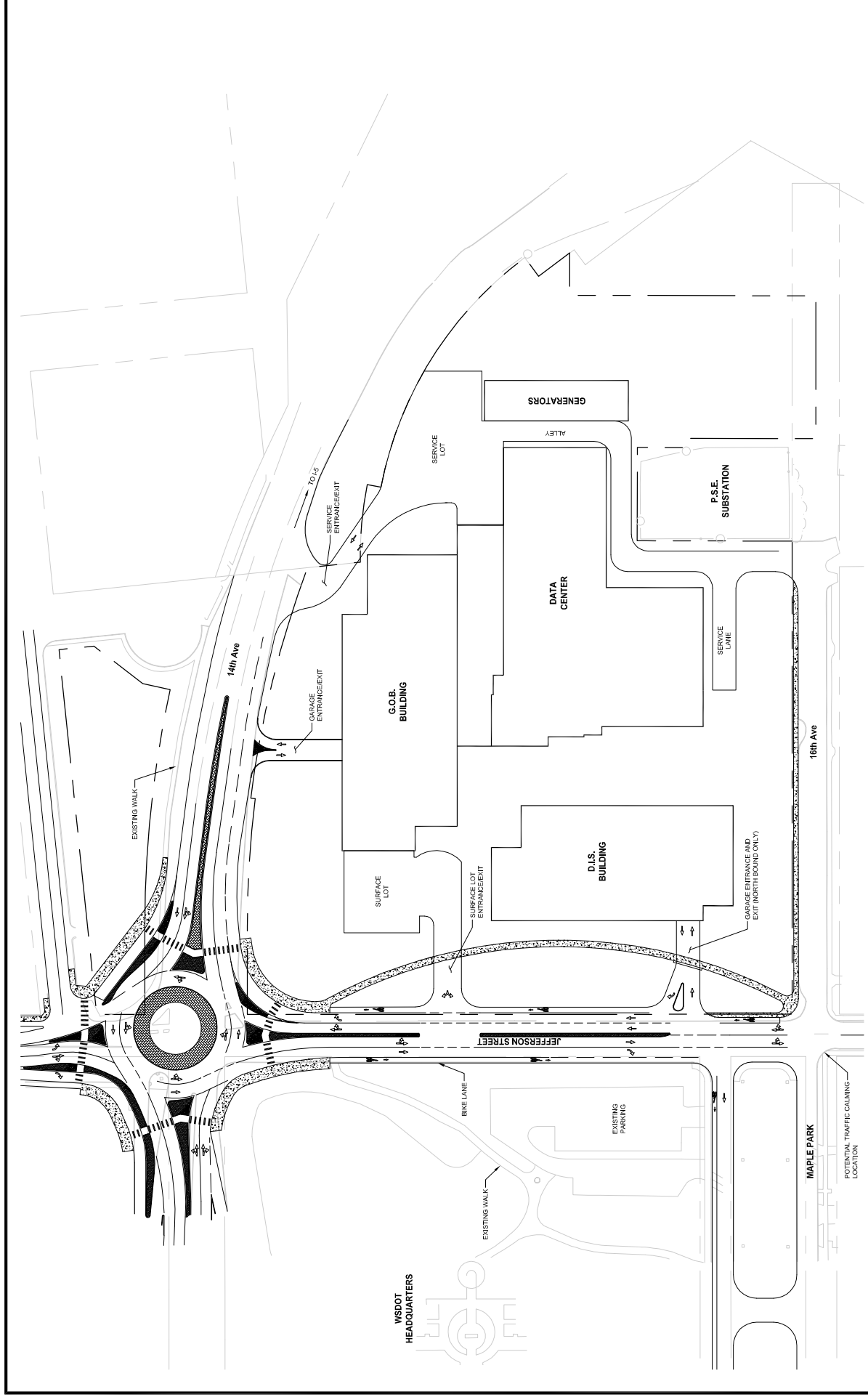


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Figure 2
Preliminary Site Plan With Conceptual Signal Improvement and Right-In, Right-Out 14th Ave Driveway
WSDIS - Wheeler Site



NO SCALE



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Figure 3
Preliminary Site Plan With Conceptual Roundabout Improvement and Right-Out Only 14th Ave Driveway
WSDIS - Wheeler Site



NO SCALE